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(71) Applicant (for all designated States except US): ARI-  
ZONA BOARD OF REGENTS [US/US]; Box 873511,  
Tempe, AZ 85287 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ANSHUMAN,  
Razdan [US/US]; 732 E. Hiddenview Drive, Phoenix,  
AZ 85048 (US). ROWE, Jeremy [US/US]; 2120 S. Las  
Palmas, Phoenix, AZ 85048 (US). COLLINS, Daniel  
[US/US]; 1417 Grandview Drive, Tempe, AZ 85281  
(US). FARIN, Gerald [DE/US]; 4952 E. Mockingbird  
Lane, Paradise Valley, AZ 85201 (US). McCARTNEY,  
Peter [US/US]; 2571 W. Temple Street, Chandler, AZ  
85224 (US). NIELSON, Gregory, M. [US/US]; 1348  
W. Mountain View, Mesa, AZ (US). SIMON, Arleyn  
[US/US]; 1102 W. Cornell Drive, Tempe, AZ 85283  
(US). HENDERSON, Mark, Richard [US/US]; 5382 W.  
Harrison Court, Chandler, AZ 85226 (US). TOCHERI,

Mathew [CA/US]; 1201 S. McClintock, Apt. 137, Tempe,  
AZ 85281 (US). CAPCO, David [US/US]; 933 E. Laguna  
Drive, Tempe, AZ 85282 (US). HU, Jiuxiang [CN/US];  
1224 E. Lemon Street #147, Tempe, AZ 85281 (US).  
MARKE, Mary [US/US]; 2052 E. Lomar Vista, Tempe,  
AZ 85282 (US).

(74) Agent: ONYE, Richard, E.; Fennemore Craig, 3003  
North Central, Suite 2600, Phoenix, AZ 85012-2913 (US).

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- as to applicant's entitlement to apply for and be granted a  
patent (Rule 4.17(ii)) for the following designations CA, JP,  
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For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: THREE-DIMENSIONAL DIGITAL LIBRARY SYSTEM

(57) Abstract: A computer system (100) and method for the storage, archiving, query and retrieval of information relating to 3D objects is provided. The system includes data acquisition (130) means for requiring point coordinate data about a three-dimensional object, a database component (105), a processor (103) and a user interface (110). The processor (103) is operable to generate modeled data (105) from the point coordinate data and to segment the modeled data (124) into feature data (122) representing a plurality of features of the object (118). The data is organized so that features of the 3D objects can be automatically extracted for online query and retrieval. The processor (103) is operable to store the modeled data (124) and the feature data (122) in the database component (105) and retrieve modeled data (124) and feature data (122) from the database component (105) using search criteria representing object features of interest. The user interface (110) is operative with the processor (103) to allow a user input search criteria to processor (103) and to display data retrieved by the processor as a representation of an object feature.

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/10665

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : G06F 17/30, G06E 1/00, G06F 15/18

US CL : 707/3;706/20; 382/190

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 707/3;706/20; 382/190

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
Please See Continuation Sheet**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| Y          | US 5,640,468 A (HSU) 17 June 1997 (17.06.1997), Fig. 5-6, column 6-14.             | 1-25                  |
| Y          | US 5,845,048 A (MASUMOTO) 1 December 1998 (1.12.1998), Fig. 9A-D, column 13-24.    | 1-25                  |

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

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P.O. Box 1450

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**Continuation of B. FIELDS SEARCHED Item 3:**  
East Search